



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,207	09/15/2003	Albert Chan	02EK-105601	2364
30764	7590	11/17/2006	EXAMINER	
SHEPPARD, MULLIN, RICHTER & HAMPTON LLP			GOFF II, JOHN L	
333 SOUTH HOPE STREET			ART UNIT	
48TH FLOOR			PAPER NUMBER	
LOS ANGELES, CA 90071-1448			1733	

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/663,207

Applicant(s)

CHAN, ALBERT

Examiner

John L. Goff

Art Unit

1733

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 25 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-31 and 33.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: See Continuation Sheet.

Art Unit: 1733

Continuation of 13. Other:

The proposed amendment has been entered, and the claims remain rejected as in the final rejection mailed 6/28/06.

Applicant argues the polymer of Nguyen does not harden. The limitation that the polymer harden requires nothing more than the polymer become more firm/harden. Nguyen teaches a liquid polymer paste, i.e. a less firm/hard polymer, that is cured and crosslinked to form a compliant very soft gel or a tough elastomer network, i.e. a more firm/hard polymer, such that the limitation is met (Paragraphs 6, 8, 15, and 18-21). Applicant also argues the elasticity of the polymer of the present invention allows it to absorb stresses such that it does not deform whereas the polymer taught by Nguyen deforms under stress. The claims are not commensurate in scope with this argument. The limitation "such that the adhesive paste hardens" merely requires the adhesive paste become more firm/harden.

Applicant argues Jayaraman et al. teach phase change polymers that become fluid when heated whereas the polymer of the present invention remains a hard solid at such operating temperatures. The claims are not commensurate in scope with this argument. Jayaraman et al. clearly teach the cured liquid polymer when cooled becomes a solid, i.e. more firm/hard, such that the limitation is met (Column 4, lines 33-35). Applicant argues there is no indication what the motivation is for the combination of Jayaraman et al. with Kristen, McCormack et al., or Pennisi et al. This argument was addressed in the previous office action, it being additionally noted the reasons are the same as applicants as set forth in paragraph 20 of the specification. Jayaraman et al. disclose reflow of fusible filler such as solder powder to form a fused interconnection which also includes non-fusible filler. It is well taken in the art of solder reflow

Art Unit: 1733

to form a fused structure such as an interconnection to include a fluxing agent to remove surface oxides from the solder power bond sites and allow the solder powder to better wet out, i.e. better fusing as the bonding sites, as shown by any one of Kristen, McCormack et al., or Pennisi et al. Applicants arguments to the non-fusible filler material including metal oxides is not persuasive as Jayaraman et al. disclose a majority of non-fusible fillers that are not metal oxides (Column 5, lines 42-47) and the non-fusible filler particles are much larger than the fusible filler particles such that the inclusion of fluxing agent would have a negligible impact on the non-fusible filler (Figures 4A and 4B).



John L. Goff



JEFF H. AFTERGUT  
PRIMARY EXAMINER  
GROUP 1300